

ABSTRACT OF THE DISCLOSURE

The MOS type solid-state imaging device has plural pixels each of which comprises a photo-diode and a photo-detector on a substrate. The photo-diode has a charge generating region to generate photo-generated charges upon light illumination. The photo-detector has a well region with a hole pocket to accumulate the photo-generated charges transferred from the charge generating region via a transfer region provided therebetween. The potential in the source region of the photo-detector changes in accordance with the amount of the photo-generated charges in the hole pocket. The potential in the transfer region may be removed by controlling the voltage to the photo-detector. In the photo-diode, a p⁺-type impurity region as the lateral overflow drain region is provided for ejecting the photo-generated charges from the charge generating region.